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Evaluation of a savings and micro-credit program for vulnerable young women in Nairobi

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promoting healthy, safe, and productive transitions to adulthood

K-Rep Development Agency

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Table of Contents

Tables & Figures

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Executive Summary

Tap and Reposition Youth (TRY) was a four-year initiative undertaken by the Population Council and K-Rep Development Agency (KDA). The overall aim of the project was to reduce adolescents' vulnerabilities to adverse social and reproductive health outcomes by improving their livelihoods options. The project targeted out-of-school adolescent girls and young women aged 16 to 22 residing in low income and slum areas of Nairobi. TRY used a modified group-based micro-finance model to extend integrated savings, credit, business support and mentoring to out-of-school adolescents and young women.

TRY included a monitoring and research component that allowed managers to track performance of the project and measure changes associated with the intervention. The impact of the TRY project on participants was assessed by comparing them to a group of suitable controls who had not been exposed to the project. The study consisted of a longitudinal study of participants with a matched comparison group identified through cross sectional community based studies, undertaken at baseline and endline to enable an assessment of changes associated with the project. TRY participants were interviewed upon entering and leaving the program. Each participant was matched to a control of approximately the same age, education, marital status, parenthood status, and employment status who lived in the same neighborhood. Controls were identified through house-to-house surveys taking place in the vicinity of the participants' homes. Comparison of participants and their controls allowed us to assess changes in the TRY participants that may be associated with the project activities. In all, 326 participants and their controls were interviewed at baseline and 222 pairs were interviewed at endline. While matching controlled for background variables such as age, education, educational attainment, marital status, and work status, we compared experimental respondents and their matched controls on economic and financial indicators, gender attitudes, and reproductive health knowledge, behavior and negotiation.

While TRY participants and their controls had comparable income levels at baseline, at endline, girls who had participated in TRY had significantly higher levels of income compared to controls. Similarly, while their household assets were similar at baseline, at endline, the assets of TRY participants were considerably higher than their peers who had not participated in the program. Comparing TRY savers and control savers, TRY participants had significantly more savings and were more likely to keep savings in a safer place, compared to control girls who were more likely to keep savings at home where they were at greater risk of being stolen or confiscated by parents, guardians or husbands. Girls who participated in TRY demonstrated changes toward more liberal gender attitudes, compared to controls. While their reproductive health knowledge was not significantly higher,

there was some indication that TRY girls had greater ability to refuse sex and insist on condom use, compared to the controls.

The study's limitations were the low response rate at endline, 68 percent, and the challenges of controlling for selectivity of TRY participants. Nearly one third of TRY participants could not be located for follow-up interview, largely those who dropped out of the program. It is possible that girls we failed to interview may have been those who are less successful participants, thus biasing our results. In addition, though respondents are matched on a large number of background variables, it is nonetheless unlikely that we could control for selectivity effects. Finally, the high rate of drop out from TRY, especially by younger adolescents, suggests that the model requires further examination and adaptation, in particular, to respond to the realities of vulnerable girls living in high HIV settings.

JULIUS MWELU, SHOOTBACK, MYSA.

I. Introduction

The last decade has witnessed increasing program and policy attention to the experience of adolescence in sub-Saharan Africa. Much of that interest stems from the fact that, in sub-Saharan Africa, young people aged 15 to 24 carry the burden of HIV infections with half of all new infections among this age group (UNAIDS, 2004, Bankole et al. 2004). Young women are particularly affected; in sub-Saharan Africa, girls aged 15 to 24 are more than three times as likely to be infected compared to their male peers (UNAIDS/UNFPA/UNIFEM, 2004). However, most existing programs for youth[1] target the unmarried and focus prevention efforts on educating on the risks of HIV and premarital sex, reducing risky premarital sexual behavior, and promoting a "just say no"-to-sex approach. What these efforts overlook is the context of sexual behavior, including conditions that may make adolescent girls and boys vulnerable to unprotected sex and HIV infection. In the 1998 Demographic and Health Survey for Kenya (KDHS), 21 percent of Kenyan girls reported that they had traded sex for money or gifts in the last year. Subsequently, a number of other studies have revealed the extent to which the sex that adolescents experience may result from force, threats, or coercion, including economic coercion (Lary et. al, 2004, Erulkar, 2004, Luke, 2003). These findings suggest that factors such as poverty and lack of financial resources and social isolation may contribute to risky sexual behavior, rather than simply lack of knowledge about HIV/AIDS. As a result, the Population Council and K-Rep Development Agency developed and tested a model to reduce the economic vulnerability and increase the social connectedness of girls residing in low-income and slum areas of Nairobi. The model uses savings, group-based credit and adult mentors to reach young women with livelihoods and social support, as well as reproductive health information. Mentors' activities included periodic organization of large seminars with invited guest speakers. Seminar topics were HIV/AIDS, prevention of mother to child transmission (PMTCT), VCT, the role of nutrition in HIV management, drug and substance abuse, relationships, child rights and violence against women, vital registration and documentation, and business management.

Evaluations of livelihoods and micro-finance programs for adult women have indicated positive impacts on a host of dimensions including financial, health, and social outcomes (Morduch, et al, 2003). For example, Credit with Education was a multi-year program carried out in Ghana and Bolivia, which compared program participants who had participated for at least one year with non-participants in program communities as well as residents in control communities (MkNelly and Dunford, 1998, 1999). In Bolivia, participants were significantly more likely than

[1] While we recognize the terms relate to different age groups, in this report, the terms "youth," "young people," and "adolescents" are used interchangeably.

non-participants to discuss family planning with their spouses. Participants were also more likely to have spoken at their communities' general assembly meeting and to have run for or held office with the community sindicato than non-participants or controls. In Ghana, there was a significant increase in participants' decision-making in children's education compared to non-participants, and participants' husbands were significantly more likely to have offered to help their wives with child care and with their income-generating activities during the previous six months as compared to non-participants' husbands. At the same time, the cross sectional design used in both these studies did not allow for control of selectivity effects, or, in other words, that program participants may be intrinsically more motivated and/or self-confident than non-participants.

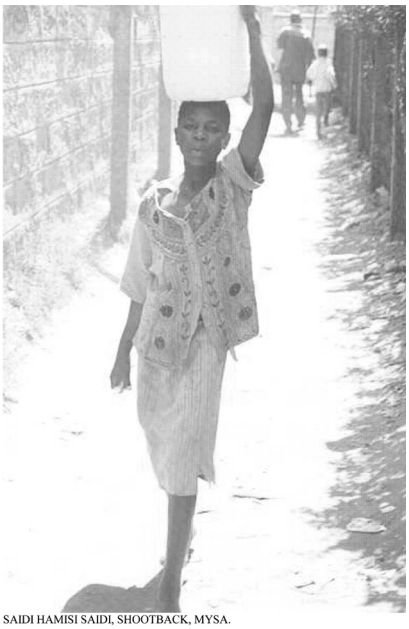
Several studies on the impact of micro-finance programs and women's empowerment have been undertaken in Bangladesh. Through a panel study design, Steele, Amin and Naved (2001) found that women's participation in a credit program had a strong independent effect on contraceptive use. After controlling for age, education, relative wealth, religion, geographic division and surviving sons and daughters, Hashemi, Schuler and Riley (1996) found that credit-program participants were significantly more empowered than the comparison group in terms of economic security, ability to make small and larger purchases, involvement in major decisions, mobility, and political and legal awareness. The authors argue that credit programs empower women by increasing their ability to contribute to their families' support, helping them to establish an identity outside of the family, and giving them experience and self-confidence in the public sphere. Hashemi et al (1996) also found that credit-based programs can reduce men's violence against women, possibly by channeling resources to families through women and by organizing women into solidarity groups that meet regularly and make the women's lives more visible.

Few programs for young people have gone beyond the health sector to address issues of economic vulnerability using a livelihoods approach. Among those that have, extremely few have included mechanisms to evaluate the impact of the programs on their beneficiaries. One that did was CEDPA's Better Life Options Program implemented in India in the New Delhi slums and rural areas of Madhya Pradesh and Gujurat (CEDPA, 2001). Better Life Options is an integrated curriculum that includes literacy training, family life education, vocational skills training, and reproductive health services for low-income adolescent girls and young women aged 12 to 20. The cross-sectional study compared Better Life Options alumnae with a similar control group of young women. After controlling for girls' education and parents' education and occupation, researchers found that a significantly higher proportion of Better Life Options alumnae than comparison girls were able to go to the market, to spend money they had earned as they desired, and to have a say in decisions surrounding when to marry and whether or not to continue their

education. However, again, the cross sectional research design makes it difficult to establish impact and control for selectivity effects, such as whether certain types of girls are more likely to join the program than others.

Another study in India evaluated an adolescent livelihoods intervention in slum areas of Allahabad, Uttar Pradesh, using a quasi-experimental pre- and post-test design (Mensch et. al, 2004). Adolescent girls aged 14 to 19 living in intervention slums received a package of activities that included provision of reproductive health information, vocational counseling and training, and assistance with opening savings accounts. Adolescent girls living in control-area slums participated in a standard reproductive health education program, but did not receive any of the livelihood components. The greatest changes among young women receiving the integrated livelihoods/reproductive health package were found in the outcomes most closely related to the content of the intervention. Compared to controls, girls exposed to the intervention were significantly more likely to have knowledge of safe spaces, to be members of a group, to score higher on a social skills index, to be informed about reproductive health, and to spend time on leisure activities. At the same time, this study faced challenges in sampling adolescents, particularly in the urban slum environment where young people are highly mobile and difficult to follow up.

This report describes the efforts of the Population Council and K-Rep Development Agency (KDA) to offer savings, micro-credit, social support and information to young women in low income and slum areas of Nairobi, Kenya. The report details the livelihoods intervention that was implemented by KDA as well as the results of the longitudinal evaluation of program participants.



SAIDI HAMISI SAIDI, SHOOTBACK, MYSA.

II. "Tap & Reposition Youth" (TRY) Savings & Micro-Credit for Adolescent Girls[2]

In 1998, the K-Rep Development Agency (KDA, formerly the Kenya Rural Enterprise Program) and the Population Council initiated a partnership that resulted in the project "Tap and Reposition Youth (TRY) Savings and Micro-Credit for Adolescent Girls." TRY targets out-of-school girls and young women aged 16 to 22[3] living in low-income and slum areas of Nairobi, and is an integrated program combining savings, micro-credit, training in business and life skills, reproductive health (RH) education, and mentoring by adults from the community. Although KDA had extensive experience in lending to adult micro-entrepreneurs since the 1980s, they had little experience with adolescents, who are relatively inexperienced in business and money management. The pilot phase of TRY took place from 1998 to 2000, during which the micro-finance model was developed and pilot tested. At the end of the pilot phase, the project was evaluated by a micro-finance expert (Sebstad, 2001) and the model was subsequently adjusted and scaled up from 2001 to 2004, including related research activities to measure changes associated with the program.

Group formation

TRY is based upon the adult *"juhudi"* (meaning "effort" in Kiswahili) group-lending model developed in Kenya by KDA. Like adult group-based micro-finance schemes, TRY participants are formed into groups of 15 to 25 members, known as KIWAs (an acronym for the Kiswahili term *kikundi cha wanabiashara*, or "group of entrepreneurs"). Each KIWA elects its own chairwoman, treasurer, and secretary, and is registered as a self-help group with the Kenya Ministry of Gender, Sports, Culture and Social Services. Following registration, the group opens a savings account under its registered name. KIWAs are subdivided into *watanos* (meaning "five" in Kiswahili) which are sub-groups of girls composed of five members each. Registered groups participate in a six-day training facilitated by KDA that includes basic business management, record keeping, marketing, pricing, budgeting, business plan development, and customer relationships. Life skills and reproductive health information are also covered. Immediately after training, TRY participants are required to begin saving a minimum of 50 Kenyan shillings (KSH) (about US$0.65) each week, with these savings serving as cash collateral against eventual loans.

Group members meet weekly with a KDA credit officer, usually in community social halls or church meeting rooms that are near the girls' homes or workplaces. During these one to two hour meetings, loan policies and procedures are reinforced,

[2]A more detailed description of the TRY experience is documented in Erulkar, Bruce, Dondo, et. al, 2006 Tap and reposition youth (TRY): Providing social support, savings, and micro-credit to young women in high HIV areas, SEEDS series.

[3]In addition to young women, young men were involved on a pilot basis as well as a small pilot undertaken in a rural area. This report examines only the impact of the large scale intervention among young peri-urban women.

weekly savings are collected and recorded, and business advice is given. For many girls, the group meetings also became an occasion to share intimate experiences of their lives and troubles, sometimes involving their relationships with partners or parents.

Micro-credit

After eight weeks of saving, each watano decides which two of its members receive the first disbursement of loans, which start from KSH 10,000 (about USD $130). The decision is made based on the strength of members' business plans and loan applications. Other *watano* members only receive their loans once current loan recipients have made timely repayments. This procedure aims to create a collective sense of responsibility toward running a profitable business and repaying loans. If the first two recipients make weekly loan payments for a month, the second two group members are given their loans. And if all four recipients make loan payments for an additional month, the final member of the *watano* receives her loan. Girls use the loans to start businesses or expand existing ventures. Activities ranged from the traditional such as hairstyling, vegetable selling, and tailoring, to the non-traditional including battery charging, welding, operating a telephone bureau.

Mentoring

To strengthen the social support component of the TRY program, KDA and the Population Council also established a cadre of part-time adult mentors drawn from various professions, including counseling, social work, business, health care, and community development. Mentors are given a five-day training that covered such topics as team building, communication, gender issues, adolescent reproductive health, lifeskills, and HIV/AIDS. Based on the needs expressed by group members, the mentors organized group discussions, educational sessions, recreation, excursions, and sports and fitness. These activities generally took place after the TRY group meetings with the credit officer, but were sometimes scheduled at other times.

Young savers clubs

Experience gained during the pilot phase revealed that the group savings and credit scheme tended to be more successful with older, more financially experienced girls. In contrast, younger adolescents expressed interest in savings and other rudimentary financial services, and in opportunities to meet friends, with somewhat less interest and readiness to take loans. A number of TRY participants left the program because of the rigidity of the savings requirement, the lack of access to their savings in the event of an emergency, and the pressure to continually take out and repay loans. In an attempt to tailor the program to meet the needs of these girls, Young Savers Clubs were established in early 2004. Rather than working towards receiving loans such as in the *juhudi* groups, the Young Savers Clubs are for girls who simply want a safe place to save their money and who enjoy having the opportunity to meet other girls every week for discussion, support, advice and mentoring.

III. Research Methods

Research design

The aim of the study was to assess changes associated with the TRY project among participants. This was a longitudinal study of TRY participants and matched controls, interviewed pre- and post-intervention. TRY participants were interviewed when they entered the program, at the time of registration and again when they exited the program, or at the end of the second phase of the program, whichever came first. The baseline data collection began in early 2002. As entry into the program was not during a fixed time period but took place over time, baseline interviews were conducted for new clients from mid 2002 through 2003. The endline questionnaire was the same instrument used at baseline, however, with additional modules on exposure to the intervention. Beginning in June 2003, clients were interviewed as they dropped out of the program, with exit interviews taking place through April, 2005.

It was hypothesized that girls who joined the TRY program would be quite selective. Therefore, the study sought to match each TRY participant with a control in her neighborhood with the same age, education, marital status, parity, and work status. It was further assumed that locating a match in the participant's neighborhood would at least partly control for socio-economic status. In order to select matched controls for TRY participants, interviewers conducted household listings in the areas surrounding the TRY girls' residences. Interviewers went house to house listing household members until they located a girl with the same characteristics as the TRY participant. Once identified, the match was asked to participate in the study and interviewed.

When a TRY participant was interviewed at exit/endline, attempts were made to locate the original match used at baseline. However, most attempts were unsuccessful. Only 17 percent of the original controls were located at endline, resulting in some controls having been interviewed twice, while others were not. Failure to locate the original controls underscores the extent to which young women move homes in these urban settings. Among endline respondents, 49 percent had moved houses in the last three years.

The survey questionnaire was a largely close-ended instrument, which included questions on a range of topics. The same survey was used at both baseline and endline, though additional questions were added at endline to assess participants' exposure to the program and perceptions. TRY participants and their controls were questioned on basic demographic details, family background, household conditions and assets, education, time use, mobility, and participation in groups, attitudes toward gender issues, paid and unpaid work, savings, boyfriends/spouses/partners, children, sexual behavior and sexual violence. The questionnaire was translated

into Kiswahili and back-translated to ensure accuracy. The questionnaires included both English and Kiswahili translations in the same version, with 82 percent of baseline interviews conducted in Kiswahili, and 15 percent conducted in English, and 3 percent in Kikuyu. A team of female interviewers was trained to conduct interviews. All interviewers were comparable in age, or only slightly older than the survey respondents, ranging in age from early 20's to early 30's, and many were from the same areas as the respondents themselves. Interviewers were trained on the questionnaire over six days and engaged in mock interviews, role-play, and a field practice outside the project area.

Throughout the project period, KDA maintained service records of girls' membership which included figures on levels of participation, number of girls savings and cumulative amount of savings, number of loans disbursed, repaid, and outstanding, number of dropouts, and repayment rate. Records were compiled on a monthly basis and entered, giving program managers an overview of the performance of the project.

Evaluation framework

One of the most common ways that micro-finance institutions assess their performance is through repayment rates. Repayment rates and other financial indicators are important benchmarks for tracking the financial performance of programs, but say little about client level outcomes or impacts. Given the importance of non-economic goals in adolescent livelihood programs, client level indicators related to these goals are essential indicators of program success. Focusing solely on repayment rates is, perhaps, overly simplistic and misleading, and neglects the significant non-economic benefits to young people participating in such programs.

From the earliest stages of TRY, partners conceived of its success in the broadest terms, acknowledging the importance of financial performance, but going beyond these measures to include other types of social and economic benefits. The evaluation examines the impact of participation across economic/financial, social, and reproductive health dimensions, with research hypotheses spanning this range, including: 1) Participation in TRY contributes to increases in individual income and savings; 2) Participation in TRY contributes to changes in attitudes regarding gender issues; and 3) Participation in TRY increases girls RH and HIV knowledge and negotiation related to sex. For each hypothesis, indicators and related questions were included in the questionnaire (Table 1).

Analysis

Table 1 describes indicators and variables used to assess differences between TRY girls and their controls. Data was entered in two separate files, one for TRY participants and their controls interviewed at baseline, and another for those

Table 1: Hypotheses, indicators, and variables

Hypothesis	Indicator	Variable	Type of variable
Participation in TRY contributes to increases in individual income and savings, and household assets	Increased earnings	Mean earnings in the last week	Continuous
		Earned at least KSH 900 (US$ 12) in the last week	Dichotomous
	Increased number of household assets	Number of household assets reported from 13 assets mentioned	Dichotomous Low = 0-6 High = 7-13
	Increased number of girls having savings	Percentage of girls saving	Dichotomous
	Increased savings	Mean amount of savings	Continuous
	Increased number of girls saving in a 'safe' place	Percentage of girls not keeping savings at home;	Dichotomous
		Percentage of girls keeping savings in a commercial bank, post bank, cooperative, building society	
Participation in TRY contributes to changes in attitudes regarding gender issues	Increased liberal attitudes on gender issues	Percentage of girls holding progressive views on eight gender issues	Dichotomous
Participation in TRY increases girls RH and HIV knowledge and sexual negotiation	Increased RH knowledge	Percentage of girls giving correct responses to eight RH/HIV knowledge questions	Dichotomous
	Increased use of condoms	Percentage of girls using condoms at last sex	Dichotomous
	Increased ability to negotiate issues related to sexual behavior	Percentage of girls able to refuse sex, insist on condom use, insist on FP use	Dichotomous

interviewed at endline. In all, 326 matched pairs were interviewed at baseline and 222 matched pairs at endline. Age, education, marital status, parenthood status, and work status were controlled for through matching. Matching participants and controls on these factors results in the two groups being much more similar than if two independent samples had been drawn. Analysis was undertaken in two stages. Comparisons were made of the experimental and control groups as a whole, for both baseline and endline surveys. McNemar's chi-squared test for matched case-control studies was used to assess differences between experimental respondents matched to their controls, for items on the questionnaire to which virtually all respondents gave answers. McNemar's chi-squared test for matched case-control studies analyzes paired data and estimates the magnitude of the association entirely on the ratio of discordant pairs (Hennekens and Buring, 1987).

Responses to some of the variables were conditional, or contingent upon responses to an earlier question. As a result, at times, there were often too few matched pairs to conduct matched pair analysis. In these cases, we compared the experimental

and control groups as a whole, using Pearson chi-square or t-tests. If groups were not significantly different on selected dimensions at baseline, but were significantly different at endline, we considered the change from baseline to endline attributable to project activities.

Data quality

The matching process creates two groups that are equivalent on the dimensions for which they are matched (age, education, marital status, parity, and work status). However, it is unlikely that matching will completely do away with selectivity. Girls who join TRY are likely to be highly selective, perhaps in terms of motivation or confidence or some other factor associated with joining a group. Therefore, results should be considered in this light.

That 326 matched pairs were interviewed at baseline and 222 interviewed at endline, implies a response rate of only 68 percent. Seventy-one percent of the girls we failed to interview had moved away or were away for an extended period. Should the participants we failed to interview differ systematically from those we did interview, this would compromise our findings. TRY respondents in the baseline dataset were coded as to whether they were ultimately interviewed at endline. We compared girls with and without follow up interviews in terms of age, education, marital status, and living arrangements, as well as on all dependent variables used in the study *(see Appendix A).* On the majority of demographic variables and dependent variables, there were no significant differences between girls interviewed during two rounds and those lost to follow-up. There was only a moderately significant difference ($p<0.1$) between groups in terms of living arrangements and parental co-residence. Whereas 19 percent of girls interviewed twice lived with both parents, only 7 percent of girls lost to follow up lived with both parents. This could suggest that girls lost to follow up live in less stable situations and may be relatively more vulnerable. At baseline, girls who were interviewed twice were more likely to report the ability to insist on condom use compared to girls lost to follow up. Importantly, all girls lost to follow-up were dropouts from the program, which implies that our endline sample is biased toward more successful and satisfied TRY participants.

TRY participants were interviewed upon entry into the program and at endline. Among controls, surveys were mainly cross sectional as it was difficult to locate the same control respondents at endline, resulting in only 17 percent of endline controls being the original baseline control respondent. One may suspect that the knowledge gained during the survey process may influence responses during subsequent rounds of survey, particularly knowledge questions. In order to assess the effect of the survey experience, we examined responses from controls interviewed at endline, comparing those who were interviewed during only one round of survey, versus two. Those interviewed twice were not significantly more knowledgeable on the eight reproductive health knowledge items, compared to those interviewed only once, a finding that suggests little or no effect of repeated rounds of survey *(analysis not shown)*.

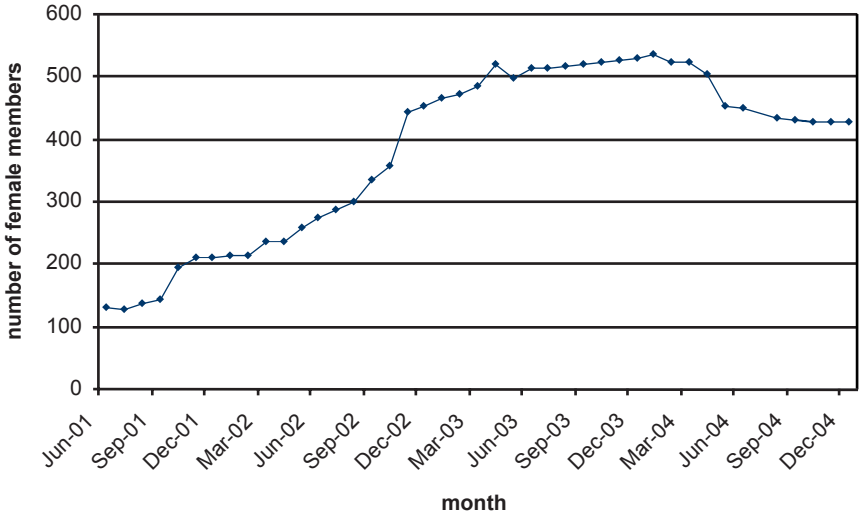
IV. Participation in TRY, 2001–04

From June 2001 through December 2004, KDA staff maintained records of monthly service statistics including information on membership, savings, credit, and delinquency. This section reports on TRY activities based, primarily, on service statistic data, but also including some analysis of surveys when appropriate. Service statistics were collected throughout the life of the project, while the survey data was collected for a more limited time, which results in some discrepancies in numbers reached.

Membership

Criteria for joining TRY was that one must be out of school, age 16 to 22[4], and be involved in a small business or have interest in starting one. After the pilot period where roughly 100 girls participated in TRY, membership grew quickly, especially in 2002, and peaked at 535 members in January 2004 (Figure 1). The increase in membership in the second half of 2002 coincides with the recruitment of additional credit officers[5], intensification of outreach efforts, and the beginning of the mentoring program. At the same time, most girls heard about TRY from friends (70 percent), rather than credit officers (6 percent).

Figure 1. Number of female members in TRY program, by month and year



(source: KDA service statistics)

[4]A number of TRY members are above the age limit of 22. This is partly due to girls joining within the age target but subsequently aging out, and also girls who joined TRY during the pilot period when the age target was 16 to 24.

[5]With two fulltime credit officer assigned to TRY, each credit officer is supposed to handle roughly 130 clients.

Table 2: Percentage of TRY participants exposed to program components, by length of exposure and status

Program component		Time in program			Status in TRY (at time of interview)	
	All TRY participants (n=222)	Less than 1 year (n=71)	12 to 23 months (n=81)	24 to 36 months (n=70)	Former member (n=147)	Current member (n=72)
Training	92.8	86.6	94.7	97.0	90.5	98.6
Savings	95.2	88.1	97.4	100.0	92.5	100.0
Loans	53.6	17.9	57.9	84.8	38.1	84.7
Mentors	92.8	80.6	97.4	100.0	88.4	100.0

Source: Endline survey

Program participation

The major elements in the TRY program were training activities, savings, loans, and access to mentors. Apart from loans, most TRY participants were exposed to program components, with exposure related to length of participation in TRY (Table 2).

Over 90 percent of TRY participants were exposed to training, savings, and to mentors during their time in TRY. Far fewer (54 percent) took micro-loans. Because loan taking involved a process of savings, formulating a business plan, and gaining approval from group members, girls who stayed in the program for a short period were least likely to take loans. Among girls who remained for less than one year, only 18 percent had taken loans. Overall, it took an average of 6 months to receive a loan. However, waiting times to receive a loan were highly variable, ranging from 1 to 30 months. Delays in receiving loans were often cited as reasons to leave the program:

> *I had already saved with K-Rep about 1000 shillings (US$13) and they were delaying to give me the loan. The credit officer kept telling me to wait for those who already have loans to repay, and then I can be given a loan. I got annoyed and decided to leave.* (20-year-old, never-married, 6 years education)

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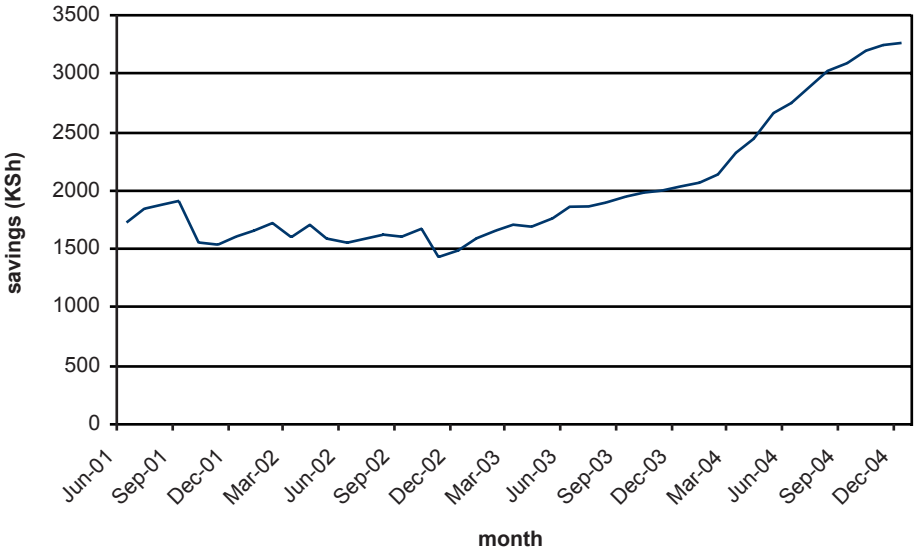
The training the participants received covered a wide range of topics, with the most common topics mentioned as credit and savings procedures (76 percent), how to write a business plan (75 percent), HIV/AIDS (87 percent), family planning (72 percent), and sexually transmitted infections (72 percent).

Savings

Savings was a major component of the TRY program, particularly after the introduction of Young Savers Clubs. The average amount of savings per saver remained fairly constant during 2002 and 2003, which is likely related to the fact that savings was linked to loans and served only as collateral. In 2004, when

Figure 2. Average amount of savings per saver (in KSH)



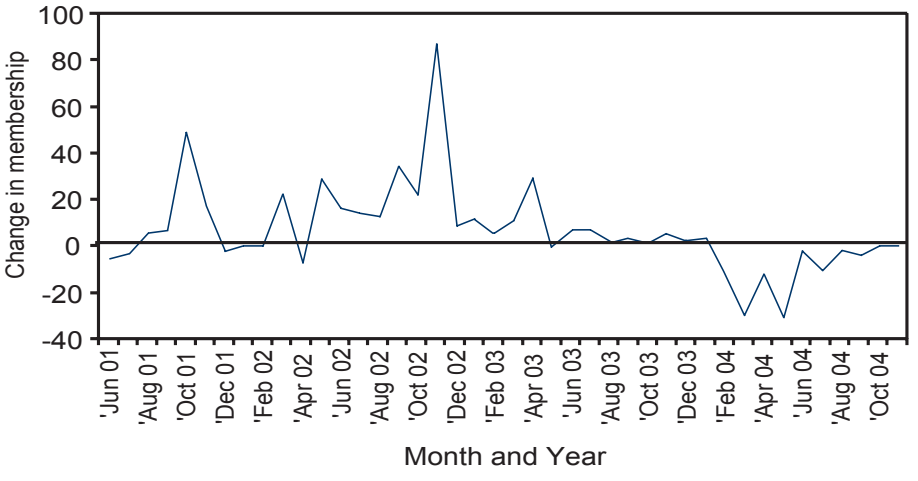
(source: KDA service statistics)

Young Savers Clubs were introduced, girls took the opportunity to save and their individual savings increased markedly (Figure 2). While TRY girls had saved an average of $23 in mid-2001, by the end of 2004, the average saver had roughly doubled their savings to $44.

Loans

While only about half of the TRY participants received loans, by December 2004, KDA had disbursed 5,938,700 KSH in loans (about USD$79,000), with the average loan size being KSH 11,300 (or about USD$150). The vast majority of TRY participants reported using their loan either to start a business (45 percent) or expand a business (45 percent). Fewer than 5 percent reported using loans for other reasons such as educating children, buying clothes, or repaying a previous

Figure 3. Absolute change in TRY membership (new clients minus dropouts), 2001–04



loan. Nearly all borrowers felt that the loan helped them (93 percent). The program struggled with repayment rates, more than half of participants found repaying the loan difficult or very difficult (56 percent). The qualitative repayment rate is defined as the number of loan payments due and paid this period divided by the number of loan payments due. Over the three years of the program, the qualitative repayment rate declined from 66 percent in mid 2001 to 50 percent by the end of December 2004.

Drop-out

At endline, most respondents had dropped out of the TRY program (66 percent) while only one third of girls remained active in TRY. Figure 2 is derived from service statistic data and reveals the absolute change in TRY membership from 2001 to 2004, calculated as new clients minus dropouts.

While membership increased, particularly in 2002, there was significant dropout during 2004. There are a number of reasons why girls left the program in 2004. One major reason for drop out was increasing suspicion among participants that they could not access their savings, so many dropped out to withdraw their savings,

Table 3: Characteristics of TRY participants, by membership status at endline

	Drop out (n=147)	Current member (n=72)
Age category		
16 to 19	23.1**	4.1
20 to 24	56.5	80.6
25 to 29	20.4	15.3
Educational attainment		
Incomp. primary	18.4	9.9
Comp. primary	34.7	42.2
Incomp. secondary	16.3	16.9
Comp. secondary	30.6	31.0
Living arrangements		
Both parents	15.6	16.7
One parent	14.3	20.8
Neither parent	70.1~	62.5
Marital status		
Never married	51.0	54.2
Married	40.8	37.5
Div/wid/sep	8.2	8.3
Mean household assets		
Low (0 to 6 assets)	46.9	34.7
High (7 to 13 assets)	53.1	65.3

*Differences between groups * p<0.05 ** p<0.01 ***p<0.001*

rather than keep it locked up as collateral. Another reason for dropout was that one credit officer was reassigned to another region and was not replaced, resulting in the one remaining credit officer not being able to attend all meetings and sustain uninterrupted credit functions. Therefore, delays in receiving loans and not having access to savings were often cited as reasons for drop out.

In order to understand whether TRY dropouts differed from those who remained in the program, we examined differences between the two groups in terms of age, educational attainment, living arrangements, marital status, and household socio-economic status (Table 3).

Girls who remained in TRY versus those who dropped out were significantly different in terms of age, with younger girls significantly more likely to drop out compared to older girls. Though not statistically significant, there was a tendency for drop-outs to have less education and live away from parents, compared to those who remained in the program. This finding has implications for the appropriateness of the model, particularly the credit component of the model, for younger, less educated adolescents who are perhaps more vulnerable.[6]

JAMES MATHEKA

[6]For more discussion, see Erulkar, Bruce, Dondo, et. al, 2006 Tap and reposition youth (TRY): Providing social support, savings, and micro-credit to young women in high HIV areas, SEEDS series.

V. Impact of TRY Project

At baseline, 326 TRY girls and an equal number of controls were interviewed.[7] Among these girls, 222 were also interviewed at endline, a follow-up rate of 68 percent. The characteristics of TRY participants and their controls appears in Table 4. As control girls were matched according to age, education, work status, marital status, and parity, it is not surprising that there were no significant differences between TRY and control girls on these dimensions. At both baseline and endline, there were slight differences in religious background between participants and controls, with TRY members more likely to be Muslim compared to controls, a difference that was significant at baseline.

Table 4: Sample characteristics of TRY participants and controls, by time of survey

Characteristics	Baseline		Endline	
	TRY (n=326)	Controls (n=326)	TRY (n=222)	Controls (n=222)
Age				
16-19	34.0	33.7	17.1	18.9
20-24	63.2	61.7	64.4	59.0
25-29	2.8	4.6	18.5	22.1
Religion				
Catholic	26.1*	30.1	23.9	29.7
Other Christian	51.8	56.7	47.3	50.5
Muslim	21.2	12.6	27.5	18.0
No relig/other	0.9	0.6	1.3	1.8
Highest Educational Level Attained				
No education	0.6	0.9	0.0	0.0
Some primary	17.5	16.9	15.4	16.3
Completed primary	33.5	33.8	37.1	37.6
Some secondary	15.3	15.3	16.7	16.7
Completed secondary	32.5	33.1	30.8	28.5
Higher education	0.6	0.0	0.0	0.9
Marital Status				
Never married	66.0	67.2	51.8	52.2
Married	26.4	25.2	39.6	39.2
Divorced/Widowed/Separated	7.6	7.6	8.6	8.6
Living arrangements[a]				
Both parents	13.9	21.7	14.8	26.1
One parent	26.3	27.5	25.2	26.1
Neither parent	59.8	50.8	60.0	47.8
Parenthood status				
Have child	54.3	55.7	65.3	66.7
No children	45.7	44.3	34.7	33.3

*Differences between TRY participants and control * p<0.05 ** p<0.01 ***p<0.001*

[a]. Among respondents who are not currently married

[7]Additional girls who joined the program during the pilot phase (before 2002) were also interviewed. These girls and their controls were removed from analysis as their "baseline" data followed several months exposure to the program activities that took place during the pilot phase.

TRY girls had varying exposure to the project activities, with some girls being TRY members longer than others. Roughly one third of TRY girls (32 percent) had been members less than one year when they were interviewed at endline; another third (36 percent) had been members for at least one, but less than two years; and 32 percent had been TRY members for two to three years. As mentioned, the majority of girls reported exposure to training under TRY, savings opportunities, and mentoring. However, just over half had received a loan through the project. We examined several dimensions of change associated with participation in TRY, including economic changes, social changes, reproductive health and sexual behavior changes.

Improvements in assets, earnings, and savings

The evaluation examines the impact of participation across economic/financial, social, and reproductive health dimensions, with research hypotheses spanning this range: 1) participation in TRY contributes to increases in individual income and savings; 2) participation in TRY contributes to changes in attitudes regarding gender issues; and 3) participation in TRY increases girls RH and HIV knowledge and sexual negotiation.

Table 5 shows household assets,[8] earnings from paid work and savings among TRY participants and controls at baseline and endline. At baseline, TRY participants and control respondents reported similar numbers of household assets. At endline TRY participants were significantly more likely to have at least seven or more household assets compared to control girls, a difference that was statistically significant.

Table 5: Household assets, earnings from paid work, and savings among TRY participants and controls, by time of survey

	Baseline		Endline	
	Control (n=326)	TRY (n=326)	Control (n=222)	TRY (n=222)
Mean no. household assets ‡				
Low (0 to 6 assets)	63.5	58.3	59.0	42.8
High (7 to 13 assets)	36.5	41.7	41.0	57.2***
Earnings from paid work				
Mean earnings per week (KSH) §	898 ($12)	986 ($13)	1038 ($14)	1277 ($17)*
Savings				
Have savings ‡	26.3	53.1***	44.6	60.4***
Mean amount of savings KSH) §	5542 ($74)*	3244 ($43)	5035 ($67)	7143 ($95)~
Where keep savings -				
Home	72.1**	54.9	67.7~	55.2
Bank (commercial, coop, postbank)	24.4	26.0	24.2	42.1**

‡ McNemar's paired chi-square § t-test - Pearson chi square
*Differences between groups significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*

[8] Respondents were read a list of 13 household assets, derived from the KDHS, and asked if anyone in their household owned the asset. Respondents' total assets were summed and recoded as a dichotomous variable including "low" (0 to 6 household assets) and "high" (7 to 13 household assets).

During selection of controls, respondents were matched on their working status, suggesting that one would not expect differences between experimental and control girls on this variable. At baseline, 44 percent of respondents were working for pay, while at endline 57 percent of respondents were working for pay. While at baseline, working girls in the two groups were earning similar wages, at endline, TRY girls were earning significantly more – about 20 percent more - than non-TRY girls.

At both baseline and endline, TRY girls were significantly more likely than control girls to have savings. The fact that a large number of TRY girls were saving could reflect their interest in business (a criterion for joining TRY) and these savings could have been put aside in anticipation of opening such a business. While TRY girls are more likely to be savers, among those who were saving, the amount of their savings was significantly less than control savers at baseline. Whereas experimental girls at baseline had saved an average of $43, control girls had saved an average of over $70. By endline, TRY girls had over doubled their savings (mean savings $95) and the amount of savings they had was significantly larger than the control group (mean savings $67). In addition, whereas only about a quarter of experimental and control girls reported saving in a bank at baseline, by endline TRY girls were significantly more likely to save in a bank compared to controls (42 percent of TRY girls compared to 24 percent of controls).

Table 6: Household assets, earnings from paid work, and savings among TRY participants and controls, by age group and time of survey[9]

	Aged 16 to 19				Aged 20 and over			
	Baseline		Endline		Baseline		Endline	
	Control (n=110)	TRY (n=110)	Control (n=65)	TRY (n=65)	Control (n=215)	TRY (n=215)	Control (n=156)	TRY (n=156)
Mean no. household assets ‡								
Low (0 to 6 assets)	65.5	61.3	66.7	46.2	63.0	56.7	55.8	41.4
High (7 to 13 assets)	35.5	38.7	33.3	53.8~	37.0	43.3	44.2	58.6***
Earnings from paid work								
Mean earnings per week (KSH) §	566 ($7)	628 ($8)	874 ($12)	1267~ ($17)	991 ($13)	1098 ($15)	1096 ($15)	1280* ($17)
Savings								
Have savings ‡	20.0	44.1	45.5	53.8	29.6	57.7***	44.2	63.1
Mean amount of savings KSH) §	2366 ($32)	1442 ($19)	2878 ($38)	6084~ ($81)	6635~ ($84)	3957 ($53)	5973 ($80)	7525~ ($100)
Where keep savings -								
Home	81.8	59.2	80.0	71.4	68.8*	53.2	62.3	49.5
Bank (commercial, coop, postbank)	4.5	18.4	13.3	26.5	31.3	29.0	29.0	47.5*

‡ McNemar's paired chi-square § t-test - Pearson chi square
*Differences between groups significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*

[9]All those interviewed at endline had also been interviewed at baseline and had been participating in the project for an average of 1.3 years. In order to adjust for aging of participants, baseline figures consist of those aged 16 to 19, and 20 and over, while endline figures consist of those aged 16 to 20 and age 21 and over.

With younger girls more likely to drop out of TRY, we examined the relative effectiveness of the program on older versus younger participants. Baseline respondents were categorized by age group, below age 20 and age 20 and above[9] (Table 6). The effect of financial indicators for older girls appeared to be greater than for younger girls. Older TRY participants were significantly more likely to have greater numbers of household assets, larger incomes, more savings, and were significantly more likely to keep savings in a financial institution. Effects for young participants were somewhat weaker, with younger TRY participants having greater incomes and savings compared to controls, though the difference was only marginally significant.

Changes in gender attitudes

In order to assess attitudes toward gender issues, respondents were read a series of statements and asked if they agree or disagree with the statement (Table 7). At baseline, TRY participants and their controls held comparable attitudes toward most issues. In two of the eight issues raised, control girls were significantly more liberal in their thinking compared to TRY girls. At endline, TRY and control girls held comparable views on five of the eight issues and TRY girls were significantly more liberal on three issues: that wives should be able to refuse their husbands sex, that marriage is not the only option for an unschooled girl, and that having a husband is necessary to be happy.

An aggregate score was computed using responses to the gender attitude statements, with one point given for each progressive attitude held. Given the eight statements, a maximum score of eight was possible. At baseline, the gender score for controls was significantly greater than the TRY girls. At endline, however, TRY girls had marginally greater gender attitude scores at the level of $p<0.1$, suggesting that the project may have impacted upon gender attitudes of participants.

Table 7: Percentage of TRY respondents and controls holding progressive gender attitudes, by time of survey

Statements ‡	Baseline		Endline	
	Control (n=326)	TRY (n=326)	Control (n=222)	TRY (n=222)
Disagree that men are better drivers than women	46.7	47.6	52.3	58.0
Agree that girls are as good as boys at business	87.9	84.3	82.6	85.8
Disagree that men spend money more carefully than women	75.0**	66.5	75.0	73.6
Disagree that it's OK for a man to beat his wife if she flirts with other men	53.6*	45.2	52.5	55.7
Disagree that women who where miniskirts deserve to be raped	32.0	31.6	47.9	41.1
Disagree that women should not be able to refuse her husband sex	40.4	33.2	34.6	48.1***
Disagree that if a girl is unschooled, the best thing for her is marriage	82.9	80.9	77.7	86.0*
Disagree that it is necessary to have a husband to be happy	46.9	46.9	42.2	51.8*
Mean aggregate gender score (0 to 8) §	**4.6***	**4.3**	**4.6**	**4.9~**

‡ McNemar's paired chi-square § t-test
*Differences between groups significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*

Changes in reproductive health knowledge, behavior and decision making

Between baseline and endline, the reproductive health (RH) knowledge of both TRY participants and their controls generally increased, likely associated with age and experience.[10] At baseline, TRY participants were marginally more knowledgeable on two RH issues compared to their controls. At endline, however, control girls were significantly more knowledgeable on two RH questions – on the safety of pills and that there is no cure for HIV – compared to TRY participants. This suggests that the TRY program did not effect significant changes in RH knowledge, or, at least, in the dimensions reflected in our survey questions.

Respondents were asked about negotiation within their current relationship - whether husbands and boyfriends – on issues such as drinking, sexual intercourse, and use of condoms and family planning. Respondents were asked if they were able to stop their partner from drinking, able to refuse sex, or able to insist on condom or family planning use. At baseline, there were no significant differences between TRY participants and controls in terms of being able to control these dimensions of their relationships. At endline, TRY girls were significantly more likely to be able to insist on condom use and to refuse sex (Table 9). TRY participants are over 1.7 times as likely to be able to refuse their partner sex and nearly three times more likely to be able to insist on condom use (OR=2.86, p<0.01), compared

Table 8: RH knowledge of TRY participants and controls, by time of survey

	Baseline		Endline	
	Control (n=326)	TRY (n=326)	Control (n=222)	TRY (n=222)
Know that pills do not cause infertility	25.2	23.9	43.2**	30.6
Know that condoms cannot get lost inside a woman's body	44.8	41.7	53.6	51.4
Know that a woman cannot always tell when a man has an STI	56.1	57.4	60.8	64.4
Know that a woman cannot always tell when she has an STI	37.1	32.8	48.2	41.0
Knows a healthy person can have HIV	92.6	95.7~	95.0	98.2*
Know that condoms do not have holes that let HIV through	36.8	41.4	49.5	50.8
Know that there is no cure for HIV	81.6	79.4	89.2**	80.0
Know that if man withdraws, HIV can still be transmitted	50.9	58.6*	53.2	56.8

*McNemar's paired chi-square Differences significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*

[10] TRY participants were interviewed upon entry into the program and at endline. Among controls, surveys were mainly cross sectional as it was difficult to locate the same control respondents at endline, resulting in only 17 percent of endline controls being the original baseline control respondent. One may suspect that the knowledge gained through the survey process may influence responses during subsequent rounds of survey, particularly reproductive health knowledge questions. We examined responses from controls and compared those interviewed at two rounds of survey with those interviewed at only one round of survey. Those interviewed twice were not significantly more knowledgeable on the eight RH items, compared to those interviewed only once, a finding that suggests little or no effect of testing.

to controls. However these results should be viewed with caution. The percent reporting ability to refuse sex actually decreased between baseline and endline, though larger decreases were experienced by the control group. In addition, TRY participants who were not interviewed at endline were less likely to be able to insist on condom use at baseline, which could have biased this result.

Table 9: Decision making within relationships by TRY participants and controls, by time of survey

	Baseline		Endline	
	Control (n=326)	TRY (n=326)	Control (n=222)	TRY (n=222)
Able to stop spouse/partner from drinking ‡	50.5	61.0	47.0	53.5~
Able to refuse sex to spouse/partner ‡	78.5	83.8	71.6	80.3*
Able to insist on condom use w/spouse/partner ‡	48.3	55.8	49.3	61.7**
Able to insist on FP use with spouse/partner ‡	80.7	82.3	88.0	87.5
Used a condom at last sex §	51.5	55.7	44.3	52.1
Took part in the decision to use a condom (decision made by self or jointly) §	88.5	96.3	96.0	98.0*

‡ McNemar's paired chi-square § Pearson chi-square
*Differences between groups significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*

VICTOR GIBENDI, SHOOTBACK, MYSA

VI. Discussion

"Tap and reposition youth" (TRY) was a four year initiative testing an integrated, group-based savings, micro-credit, and mentoring scheme among young women in urban slum areas of Nairobi, Kenya. The project was implemented by K-Rep Development Agency (KDA), with technical assistance from the Population Council. Research activities included monitoring of project performance through service statistics as well as a longitudinal study of participants matched to controls in order to assess changes associated with the program.

At its peak, TRY members numbered 535, with membership growing after intensification of outreach, a greater number of staff devoted to the project, and introduction of a mentoring program. Most members were exposed to the training, savings, and mentoring opportunities the program offered, though only about half of the participants received a micro-loan. Delays in receiving loans were often cited as reasons to leave the program, as were the non-flexible savings scheme that locked up girls' savings as group collateral and did not allow them access, even in the case of emergencies. As a result, those who left the program tend to be the younger girls, and possibly those who were more vulnerable and less able to lock away savings for an extended period. At the same time, when a voluntary savings scheme was introduced, many girls took advantage of the service and the average amount of savings per saver increased considerably.

Program managers hypothesized that participation in the program would result in both financial and non-financial benefits, including those associated with gender attitudes, reproductive health knowledge and behavior, and sexual negotiation. Indeed, TRY participants exhibited stronger financial outcomes compared to controls, having higher incomes, more savings, and tending to keep savings in a safer place (bank) compared to controls who were more likely to keep savings at home, where it can be confiscated or stolen. In addition, the gender attitudes of TRY participants seemed to become more liberal, over and above their colleagues in the comparison group. At endline, TRY girls were over twice as likely to believe a wife should be able to refuse her husband sex compared to girls in the control group.

Despite mentors undertaking a considerable number of educational and training activities related to reproductive health, TRY participants did not seem more knowledgeable on the reproductive health questions posed in the survey than girls in the control group. There was some indication that they may be better able to negotiate safer sexual relations including condom use, though high loss to follow up at endline prevents us from drawing this conclusion definitively.

The experience from TRY suggests that rigorous micro-finance models may be appropriate for a sub-set of girls, especially those who are older and perhaps less vulnerable. Indeed for this group of girls, the model appeared to be effective in

improving girls' status on a range of economic indicators. The impact on non-economic indicators is less clear. This was perhaps hampered by low sample size, loss to follow up, or insufficient exposure to the intervention. In addition, that such a large number of girls dropped out of the program implies that the model was not appropriate to most girls, especially the most vulnerable. The model was late in addressing girls' need for safe and accessible savings and overlooked the divisive nature of group-based collateral. Additional experimentation and adaptation is required to develop livelihoods models that acknowledge and respond to the particular situation of adolescent girls.

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Appendix A

Comparison of TRY Participants Interviewed Twice Versus Those Lost to Follow Up

	Interviewed baseline and endline	Interviewed baseline only (lost to follow-up)
Age category		
16 to 19	33.1	37.0
20 to 24	64.1	60.5
25 to 29	2.9	2.5
Educational attainment		
Incomp. primary	19.2	14.8
Comp. primary	33.5	33.3
Incomp. secondary	16.3	12.3
Comp. secondary	31.0	39.5
Living arrangements		
Both parents	19.2~	7.4
One parent	20.0	22.2
Neither parent	60.8	70.4
Marital status		
Never married	62.9	75.3
Married	29.0	18.5
Div/wid/sep	8.2	6.2
Mean no. household assets		
Low (0 to 6 assets)	59.6	54.3
High (7 to 13 assets)	40.4	45.7
Mean earnings per week	KSH 936	KSH 1159
Have savings	54.7	48.1
Where keep savings		
Home	58.2	43.6
Bank	23.1	35.9
Able to stop spouse from drinking	60.7	61.8
Able to refuse sex	83.1	86.3
Able to insist on condom use	59.7*	40.5
Able to insist on family planning	83.4	78.3

*Differences between groups significant at ~ p<0.10 * p<0.05 **p<0.01 ***p<0.001*